

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Wayne R. Thomas and Kaw-Yak Chua

Serial No.: Not Yet Assigned

Filed: Herewith

For: *A HOUSE DUST MITE ALLERGEN, DER F VII, AND USES THEREFOR*

Attorney Docket No.: IMI-032CP2DV

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

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Washington, D.C. 20231

CERTIFICATION UNDER 37 CFR 1.10

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I hereby certify that this 37 CFR 1.53(d) request and the documents referred to therein as enclosed are being deposited with the United States Postal Service on the date indicated above in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR 1.10 and addressed to the Box Patent Application, Commissioner for Patents, Washington, D.C. 20231.

Larry Taylor
Name of Person Mailing Paper

Larry Taylor
Signature of Person Mailing Paper

PRELIMINARY AMENDMENT

Dear Sir:

Prior to examination of the above-identified divisional application, please amend the application as set forth below.

In the Specification:

At page 1, line 3, before "Background of the Invention", please insert the following paragraph:

Related Applications

This application is a divisional application of U.S. serial number 08/553,336 filed on December 14, 1995 (pending), which claims priority to PCT/AU94/00117 filed on March 11, 1994 (published in English), which in turn claims priority to U.S. serial number 08/031,141 filed on March 12, 1993 (abandoned) and U.S. serial number 08/081,540 filed on June 22, 1993 (pending).

At page 1, lines 1 and 2 and page 50, lines 1 and 2, please amend the title as follows:

A HOUSE DUST MITE ALLERGEN, *DER F* VII, AND USES THEREFOR**In the Claims:**

Please cancel claim 1 and add the following new claims:

80. (New) An isolated nucleic acid encoding a *Der f* VII protein allergen wherein the nucleic acid comprises the nucleotide sequence shown in Fig. 6A and 6B (SEQ ID NO: 6), or the coding region thereof.

81. (New) An isolated nucleic acid encoding a *Der f* VII protein allergen, comprising the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7), or the mature portion thereof.

82. (New) An isolated nucleic acid encoding an antigenic peptide of a *Der f* VII protein allergen, wherein the protein allergen comprises the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7), and wherein the antigenic peptide comprises at least one epitope of said allergen, but not the full-length protein allergen, and is not cross-reactive with *Der p* VII protein allergen.

83. (New) The nucleic acid of claim 82, wherein the epitope is a T cell epitope.
84. (New) The nucleic acid of claim 82, wherein the epitope is a B cell epitope.
85. (New) An isolated nucleic acid sequence encoding a protein allergen capable of stimulating T cells specific for *Der f* VII protein allergen, but not *Der p* VII protein allergen, wherein the *Der f* VII protein allergen comprises the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7).
86. (New) An isolated nucleic acid encoding a polymorphic variant of a *Der f* VII protein allergen comprising the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7).
87. (New) A vector comprising the nucleic acid of claim 81.
88. (New) A host cell containing the vector of claim 87.
89. (New) A method of producing a *Der f* VII protein allergen comprising culturing the host cell of claim 88 under conditions appropriate for expression of *Der f* VII protein and isolating *Der f* VII protein from the culture.
90. (New) A vector comprising the nucleic acid of claim 82.
91. (New) A host cell containing the vector of claim 90.
92. (New) A method of producing a *Der f* VII protein allergen comprising culturing the host cell of claim 91 under conditions appropriate for expression of *Der f* VII protein and isolating *Der f* VII protein from the culture.

REMARKSAmendments to the Specification

The specification has been amended to update the information regarding related applications. The title of the specification has also been amended. No new matter has been added.

Amendments to the Claims

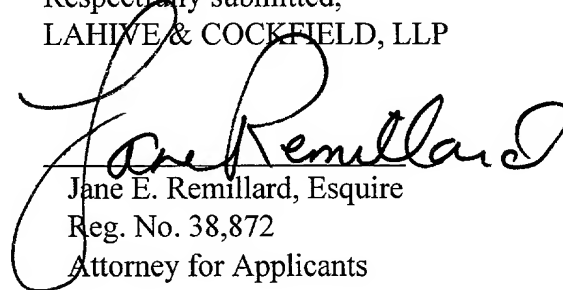
Claim 1 has been canceled herein. Claims 2-79 were canceled in the transmittal form accompanying the present application as originally filed. New claims 80-92 have been added herein. Accordingly, claims 80-92 are currently pending in the application. Support for new claims 80-92 can be found in the specification and the claims as originally filed.

No new matter has been added. Attached hereto is a marked-up version of the changes made to the specification and the claims by the current amendment. The attached page is captioned "Version with Markings to show changes made." Also attached hereto is a copy of all the pending claims as amended. This attached page is captioned "Pending Claims."

SUMMARY

In view of the amendments and remarks set forth above, it is respectfully submitted that this application is in condition for allowance. If there are any remaining issues, the Examiner is invited to call the undersigned at (617) 227-7400.

Respectfully submitted,
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Dated: 12/19/01

Version with Markings to Show Changes Made**In the Specification:**

At page 1, line 3, before "Background of the Invention", the following paragraph has been added:

Related Applications

This application is a divisional application of U.S. serial number 08/553,336 filed on December 14, 1995 (pending), which claims priority to PCT/AU94/00117 filed on March 11, 1994, which in turn claims priority to U.S. serial number 08/031,141 filed on March 12, 1993 (abandoned) and U.S. serial number 08/081,540 filed on June 22, 1993 (pending).

At page 1, lines 1 and 2 and page 50, lines 1 and 2, the title has been amended as follows:

A HOUSE DUST MITE ALLERGEN, *DER F* VII, AND USES THEREFOR

In the Claims:

Claim 1 has been canceled.

New claims 80-92 have been added.

Pending Claims

80. An isolated nucleic acid encoding a *Der f* VII protein allergen, wherein the nucleic acid comprises the nucleotide sequence shown in Fig. 6A and 6B (SEQ ID NO: 6), or the coding region thereof.

81. An isolated nucleic acid encoding a *Der f* VII protein allergen, comprising the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7), or the mature portion thereof.

82. An isolated nucleic acid encoding an antigenic peptide of a *Der f* VII protein allergen, wherein the protein allergen comprises the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7), and wherein the antigenic peptide comprises at least one epitope of said allergen, but not the full-length protein allergen, and is not cross-reactive with *Der p* VII allergen.

83. The nucleic acid of claim 82, wherein the epitope is a T cell epitope.

84. The nucleic acid of claim 82, wherein the epitope is a B cell epitope.

85. An isolated nucleic acid sequence encoding a protein allergen capable of stimulating T cells specific for *Der f* VII protein allergen, but not *Der p* VII protein allergen, wherein the *Der f* VII protein allergen comprises the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7).

86. An isolated nucleic acid encoding a polymorphic variant of a *Der f* VII protein allergen comprising the amino acid sequence shown in Fig. 6A and 6B (SEQ ID NO:7).

87. A vector comprising the nucleic acid of claim 81.

88. A host cell containing the vector of claim 87.

89. A method of producing a *Der f* VII protein allergen comprising culturing the host cell of claim 88 under conditions appropriate for expression of *Der f* VII protein and isolating *Der f* VII protein from the culture.

90. A vector comprising the nucleic acid of claim 82.

91. A host cell containing the vector of claim 90.

92. A method of producing a *Der f* VII protein allergen comprising culturing the host cell of claim 91 under conditions appropriate for expression of *Der f* VII protein and isolating *Der f* VII protein from the culture.